

REMARKSIN THE CLAIMS:

Applicants have requested that claims 1 – 52 and Claim 59 be withdrawn and canceled as these claims are directed to non-elected inventions. Claims 54 – 56, are respectfully requested canceled. Claims 53, 57, and 58 are requested amended and NEW Claim 60 is ADDED to better recite the invention.

## CLAIM 53 IS AMENDED AS FOLLOWS

In ORIGINAL line 1 of the claim, the words “plurality of” are DELETED as unnecessary and redundant since the claimed method is applicable to producing any number of glass rods as is recited in the step of drawing in ORIGINAL line 10 of the claim.

In ORIGINAL line 3 of the claim, the words “a source of” are DELETED to better describe the invention since the method claimed requires the materials themselves rather than a source of materials. Support is found at page 25, line 4 of the specification.

In ORIGINAL line 4 of the claim, the phrase -- separately reacting each of said reactant materials by separately -- are ADDED BEFORE the word “heating” and the words -- each of -- are ADDED BEFORE the words “reactant materials” in order to claim the invention as it is described in the specification. Support is found on page 25, lines 4 – 13 of the specification.

In ORIGINAL line 5 of the claim, the words “thereby providing” are DELETED and REPLACED with the words -- to provide -- and the words -- each of -- are ADDED AFTER the words “oxides of” and BEFORE the words “of said one”. The changes are made to better describe the invention and to remove indefiniteness and to provide antecedent support for the element “one or more reactant materials” brought about by the amendment in line 4.

In ORIGINAL line 6 of the claim, the comma and words “, said oxides forming as a finely dispersed powder” are DELETED as extraneous. The change is made to better recite the claim and to allow for re-introducing the limitation “dispersed” in line 7 of the claim.

In ORIGINAL line 7 of the claim, AFTER the words “collecting said” the word “oxide” is DELETED and REPLACED with its plural form -- oxides --; and directly AFTER

the newly inserted word “oxides” the phrase -- of each of said reactant materials as dispersed -- ADDED BEFORE the word “powders”. The change is made to better recite the invention and to account for the amendments in lines 4, 5 and 6 above. Support for “oxides” and for “dispersed” is found in ORIGINAL line 6 of the claim.

Again in ORIGINAL line 7 of the claim, the comma and phrase -- , wherein the step of collecting includes collecting a predetermined quantity of said powders by measuring an incremental weight gain of said silica ampule as said powders are collected -- is ADDED AFTER the word “ampule” and BEFORE the semicolon ending the clause. The change is made to place the claim in condition for allowance by adding the limitations of claim 56, now canceled wherein support is provided for the amendment.

In ORIGINAL line 8 of the claim, AFTER the words “said collected” the word “powder” is DELETED and REPLACED with the words -- oxide powders --. The change is made to account for the amendment to line 7 above and correct the antecedence of the term “powder”.

CLAIMS 54 – 56 ARE ACNECLED

CLAIM 57 IS AMENDED AS FOLLOWS

In ORIGINAL line 1 of the claim, the words -- one or more -- are ADDED BEFORE the words “reactant materials” to correct the antecedence of the term “reactant materials”.

In ORIGINAL lines 1 and 2 of the claim, the words “one or a combination of” are DELETED and REPLACED with the words -- reactant species selected from the list consisting of -- in order to place the claim in proper Markush form to address a perceived source of indefiniteness in the claim. Support for “reactant species” is found at page 25, line 4, and for “halide compounds and chelated complexes” at page 2, lines 10 – 11 of the specification.

In ORIGINAL line 2 of the claim, a comma is ADDED AFTER the word “compounds”; the word “and” BEFORE the word “chelated” is DELETED; a comma is ADDED AFTER the word “complexes”; and the words -- and combinations thereof -- are ADDED BEFORE the period ending the sentence. The changes are made to complete the process of placing the claim in Markush form. Support for “combinations thereof” is

found in the inherency of meaning of the words "a combination of" in the ORIGINAL claim.

CLAIM 58 IS AMENDED AS FOLLOWS

In ORIGINAL lines 1 and 2 of the claim, the words "and chelated complexes comprise materials" are DELETED and REPLACED with the word -- are comprised of elements --. The change is made to clarify the meaning of the claim. Support is found in the inherency of the definition of a chemical compound or complex: that each is comprised of one or more elements.

In ORIGINAL line 4 of the claim, the word "or" is DELETED and REPLACED with the word "and" in order to placed the claim in proper Markush form.

CLAIM 59 IS WITHDRAWN

CLAIM 60 IS ADDED. SUPPORT FOR THE NEWLY ADDED CLAIM IS FOUND IN THE SPECIFICATION AT PAGE 2, LINE 10 – 11 AND AT PAGE 25, LINES 4 – 13 AND IN ORIGINAL CLAIM 58.

Applicants assert that no new matter has been introduced as the result of the foregoing amendments.

### Objection to the Claims

#### ***Examiner's §2***

Claims 53 – 58 are pending in the instant application.

Claim 58 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 57 requires the use of a compound or a complex. Claim 58 limits the reactants to elements. Elements are neither compound or complexes. Claim 58 takes the scope of the invention completely out side the scope of claim 57 - it fails to further limit claim 57. Claim 58 is not further treated on its merits.

Examiner requires appropriate correction.

#### ***Applicants' Response***

Applicants thank the Examiner for his remarks. Applicants have amended Claims 57 and 58 and added a new Claim 60 to address the Examiner's concerns. Applicants note, that they have amended Claim 57 to recite a Markush group consisting of "halide compounds", "chelated complexes" and "combinations" of halide compounds and chelated complexes. Moreover, Claim 58 and new Claim 60 have been rewritten to further limit each of the "halide compounds", and "chelated complexes", respectively, to comprise any of several listed "elements".

Applicants now assert that, having made the changes to Claims 57 and 58, they have overcome the Examiner's objection and respectfully request the Examiner reconsider and withdraw the objection and pass these claims to allowance.

### Rejection of the Claims under 35 USC 112

#### ***Examiner's §3***

Examiner has rejected Claims 53-57 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In particular, Claim 53, line 3 indicates that there can be exactly one reactant. However, line 4 seems to require that there are reactant "materials" (i.e. more than one). It is unclear if there can be one, or if there must be more than one. Likewise from lines 5 and 6 it is unclear if there must be more than one powder.

Claim 54: it is unclear if the materials and powders of claim 54 are in addition to the materials and powders of claim 53, or if the claim merely limits the material and powder of claim 54

### ***Applicants' Response***

Applicants thank the Examiner for his remarks but respectfully disagrees with his conclusion. Examiner states that Claim 53 recites that there can be "*exactly one reactant*" (emphasis added). Applicants note that claim 53 in both the preliminary amendment initiating the instant application and in the original application recite in line 3: "... providing a source of one or more reactant materials;" (emphasis added). Moreover, this applies to lines 5 and 6 as well. Applicants have claimed their invention as "one or more" to mean "one or many" materials and "one or many" oxides formed therefrom.

Applicants, however, have amended their Claim 53 so as to clarify they claimed subject matter and canceled Claim 54.

By making these changes, Applicants now assert that they have overcome the Examiner's rejection in Claims 53 and 54, and respectfully request the Examiner to reconsider and withdraw the rejection, and pass these claims to allowance.

### **Rejection of the Claims under 35 USC §102 and §103**

#### ***Examiner's §4***

Examiner has rejected Claims 53-54 and 57 are rejected under 35 U.S.C. §102(b) as being anticipated by DiGiovanni, et al., (U.S. Patent Serial Number 5,058,976).

In particular, Examiner notes that col. 10, line 25 discloses a reactant material: it is inherent that there is a source for it. The heating and the flowing are disclosed: col. 10, lines 34-36. As to the finely dispersed powder: since DiGiovanni does the same

thing applicant discloses in figure 1, the same finely dispersed powder would result. As to the collection in a silica ampoule col. 10, line 27. The melting to form a boule: col. 10, lines 50-51. The only way to collapse a glass tube is to heat until it is softened. Lines 54-56 disclose the drawing into a rod.

Claim 54: see claims 10-11 which discloses two different layers which requires two different powders.

Claim 57 is clearly met.

### ***Examiner's §5***

Examiner has rejected Claim 55 under 35 U.S.C. §103(a) as being unpatentable over DiGiovanni, et al., ('976) as applied to claim 53, and further in view of Berkey (U.S. Patent Serial Number 4,931,076).

Examiner notes that DiGiovanni does not disclose the use of a ring burner. It is known in the optical fiber art that ring burners produce uniform heat conditions ( Berkey, ('076) col. 7, lines 8-10). It would have been obvious to use a ring burner for the DiGiovanni heating, since such supplies uniform heat.

### ***Applicants' Response***

Applicants thank the Examiner for his remarks and for his allowance of Claim 56, if rewritten in proper independent form and to include the limitations of any intervening claims.

In view of the Examiners suggestion, Applicants have amended their Claim 53, to include the limitations of Claim 56 (which is functionally equivalent to amending Claim 56 to include the limitations of Claim 53). Furthermore, Applicants have canceled Claim 55 and have therefore rendered moot the rejection under §103.

Applicant consequently assert, that by amending their Claim 53 to include the limitations of Claim 56, canceling Claim 55 and amending Claims 57 and Claim 58 to remove the noted indefiniteness, they have overcome the objections and rejections to Claims 53, 57, and 58. Applicants, therefore, respectfully requests the Examiner to reconsider and withdraw his rejection and pass these claims and newly added Claim 60 to allowance.

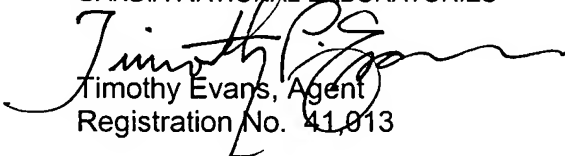
### CONCLUSION

In summary, Applicants assert they have cured the objections and rejections to the claims and have shown that the instant invention now claims a unique method neither anticipated nor suggested by the prior art. Favorable reconsideration of claims now presented and allowance of this application is earnestly solicited.

This response is, therefore:

Respectfully submitted by,

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